



FILED VIA ECFS

March 16, 2020

Marlene H. Dortch Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20510

Jeffrey Marks
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North America
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Re: *Notice of Ex Parte Presentation, Proposal to Permit Lower Gain Antennas in the 70/80 GHz Band*

WT Docket No. 10-153, Amendment of Part 101 to Facilitate Wireless Backhaul;
GN Docket No. 14-177, IB Docket No. 15-256, RM-11664, WT Docket No. 10-112, IB
Docket No. 97-95, Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, et al.

Dear Ms. Dortch:

On March 12, 2020 and March 16, 2020, representatives from Aviat, Comsearch, Ericsson and Nokia ("5G Wireless Backhaul Advocates") met in separate meetings via WebEx with (1) staff of the Wireless Telecommunications Commission; (2) Aaron Goldberger, Legal Advisor to Chairman Ajit Pai; (3) Erin McGrath, Legal Advisor to Commissioner O'Rielly; (4) Will Adams, Legal Advisor to Commissioner Brendan Carr; (5) Umair Javed, Legal Advisor to Commissioner Jessica Rosenworcel; and (6) William Davenport, Chief of Staff and Senior Legal Advisor to Commissioner Geoffrey Starks. The attendees for the 5G Wireless Backhaul Advocates and for the Commission at each meeting are listed on Attachment A. The PowerPoint presentation submitted with this cover letter was presented at each meeting.

The 5G Wireless Backhaul Advocates request a discrete change to the Part 101 microwave rules governing antenna gain in the 70/80 GHz Band, also known as the E-Band (71-76 GHz and 81-86 GHz), to allow for the use of smaller, lighter, lower cost, less susceptible to pole sway, and more visually attractive antennas for wireless backhaul, ideal for 5G network

densification where wired backhaul is often not available to every site. To achieve these benefits, we propose that the Commission reduce the minimum antenna gain for the E-Band from 43 dBi to 38 dBi, and remove the co-polar discrimination requirement in footnote 14 applicable below 5°. ¹ The 5G Wireless Backhaul Advocates also suggest “desired but not required” adjustments to the rules to ensure that only those antenna registrations that are constructed and active remain in the Commission’s database used for coordinating new deployments in the band.

The request for lower minimum gain in the E-Band is far from new. Indeed, the Fixed Wireless Communications Coalition (FWCC) had the foresight to request such a rule change as far back as 2012 and has reiterated the growing need for smaller antennas, including a requested minimum gain of 38 dBi. ² Unfortunately, FWCC’s common sense proposal has stalled, and the 5G Wireless Backhaul Advocates seek expedited action at this time. To that end, we augment the record in the above-captioned proceedings by demonstrating that the existing licensing and coordination frameworks need not be modified to accommodate a minimum gain of 38 dBi. Further, no other rule changes are required; lowering the minimum gain can be done as a simple, technical rule change and the current licensing and coordination frameworks, along with all other technical rules, that apply to the band today would remain in place.

While we propose that improved Commission database hygiene is desired, it is by no means a prerequisite to the underlying request to allow lower minimum gain antennas. In contrast to the FWCC proposal, we do not ask the Commission to impose a channel plan for the 70/80 GHz band. We also do not advocate for 45-degree polarization, proposed by FWCC, as this tool is not needed to mitigate interference. In order to utilize the largest ecosystem of antennas and harmonize the Commission’s rules with global standards, we propose that the requirements for antenna radiation suppression below 5° are removed from the Commission’s rules, recognizing that ETSI antennas are not specified below 5°. FWCC has suggested a modification to the specification below 5° to accommodate 38 dBi antennas, seeking to achieve a similar affect, rather than our proposal to remove the requirement altogether.

The simple rule change we request is long overdue and we anticipate substantial customer demand for proposed lower gain antennas once permitted in the U.S. Once our proposal is adopted by the Commission, the U.S. rules would be globally harmonized, and a global equipment ecosystem would be immediately available to U.S. carriers. We therefore ask that the Commission seek comment on this streamlined, discrete proposal, and adopt the proposed rule change without delay so carriers can integrate smaller, lighter wireless backhaul into their 5G network designs as soon as possible.

¹ See Section 101.115(b)(2) (table) and n.14.

² See, e.g., Letter from Cheng-yi Liu and Mitchell Lazarus, Fletcher, Heald, and Hildreth (Counsel for the Fixed Wireless Communications Coalition), to Marlene Dortch, FCC, WT Docket No. 10-153, GN Docket No. 14-177, *et al.*, at 3&n.5 and Appendix (filed Feb. 13, 2018).

Please contact the undersigned with any questions in connection with this submission.

Respectfully submitted,

/s/ Jeffrey A. Marks

Jeffrey A. Marks
Head of Regulatory Affairs
North America

cc: Commission attendees listed on Attachment A

Attachment A

<p style="text-align: center;"><u>March 12, 2020 Meetings</u></p> <p><i>Wireless Telecommunications Bureau</i></p> <ul style="list-style-type: none">• Stephen Buenzow, FCC• Peter Daronco, FCC• Anthony Patrone, FCC• Blaise Scinto, FCC• Sean Spivey, FCC• Jeff Tignor, FCC <ul style="list-style-type: none">• Ruth French, Aviat• Peter Young, Comsearch• Joseph Marzin, Comsearch• Bengt Stensby, Ericsson• James Flodin, Ericsson• Mark Racek, Ericsson• Sorin Bucioaca, Nokia• Doug Davies, Nokia• Paolo Di Prisco, Nokia• Mario Giovanni Frecassetti, Nokia• Jeffrey Marks, Nokia• Prakash Moorut, Nokia <p><i>Office of Commissioner Jessica Rosenworcel</i></p> <ul style="list-style-type: none">• Umair Javed, FCC• Peter Young, Comsearch• Joseph Marzin, Comsearch• Mark Racek, Ericsson• Doug Davies, Nokia• Jeffrey Marks, Nokia	<p><i>Office of Commissioner Brendan Carr</i></p> <ul style="list-style-type: none">• Will Adams, FCC• Peter Young, Comsearch• Joseph Marzin, Comsearch• Mark Racek, Ericsson• Doug Davies, Nokia• Jeffrey Marks, Nokia <p style="text-align: center;"><u>March 16, 2020 Meetings</u></p> <p><i>Office of Chairman Ajit Pai</i></p> <ul style="list-style-type: none">• Aaron Goldberger, FCC• Ruth French, Aviat• Joseph Marzin, Comsearch• Mark Racek, Ericsson• Doug Davies, Nokia• Jeffrey Marks, Nokia <p><i>Office of Commissioner Michael O’Rielly</i></p> <ul style="list-style-type: none">• Erin McGrath, FCC• Ruth French, Aviat• Joseph Marzin, Comsearch• Mark Racek, Ericsson• Doug Davies, Nokia• Jeffrey Marks, Nokia <p><i>Office of Commissioner Geoffrey Starks</i></p> <ul style="list-style-type: none">• William Davenport, FCC• Ruth French, Aviat• Joseph Marzin, Comsearch• Mark Racek, Ericsson• Doug Davies, Nokia• Jeffrey Marks, Nokia
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